The little petticoat is intended for a child between two and three years of age, and is worked in Shetland wool. The waist is knitted, the skirt crocheted. You require a pair of No. 13 needles and a erochet book the same number. Cast on for the waist, on the knitting needles, 102 stitches.

1st row: * Knit 3, purl 3; repeat from *. 2d row: Purl 3, knit 3; repeat these 2 rows until

you have knitted 85 rows, then cast off. Cast on again 102 stitches, and work another piece exactly like the last. Sew the two sides together, the first 12 rows of each piece for the shoulders, leave the next 36 unsewn for the armhole, and sew the remainder together.

Now with the crochet hook work the skirt. Begin at a join on the side of the body; work 1 troble, * 1 ch., miss 1 stitch, 1 treble in the next; repeat from Join neatly at the end of the row.

2d round : Over the 1st ch. work 2 treble, * 1 ch., over the next chain of last row work 2 treble; re-Work 9 more rounds in this manner. peat from ". 12th round: * Over the 1 ch. of last round work 3 treble, 1 ch.; repeat from . Work 11 more rounds like this.

24th round: * 4 treble over the next ch., 1 ch.; repeat from . Work 5 rounds like the 24th round. 30th round: Over the 1st ch. of last round * work 2 treble, 1 ch., 2 treble, 1 ch., repeat from on each chain stitch.

31st round: "Over the next chain between the 4 treble stitches, worked together, work 2 treble, 1 ch., 2 treble, then 1 ch.; repeat from . Repeat the 31st round twice more, 34th round: * Work over the next chain between

the 4 treble stitches, 3 treble, 2 ch., 3 treble, then 1 ch.: repeat from ". 35th round : Over each 2 ch. of last round work 8 treble and fasten off neatly. Round the neck and arm holes, crochet in every 3d stitch, 5 treble, and

VINE TIDY.

From Mrs. S. G. Flanders, of San Francisco, come these directions for a pretty tidy which she calls a Vine Tidy. The same pattern slightly modified is in Mrs. Gangain's book, and is there also recommended as useful for mittens. Shetland shawis, etc.: Cast on 89 stitches, and knit across alternately eleven times plain and purl-plain when the smooth side is nearest the knitter, and purl when the rough sidé is nearest.

1st pattern row: Knit 12 plain, narrow once, *thread over and narrow three times, over, knit 1 plain, over, knit 2 plain, shp and bind (that is, slip 1, knit 1, and throw the slipped stitch over), knit 4 plain, slip and bind, knit 2 plain, repeat from twice, then over and narrow three times, over, knit 12 plain.

2d row : Parl. All even rows the same. 3d row: Knit 11 plain, narrow once, over and narrow 3 times, over, knit 3 plain, over, knit 2 plain, slip and bind, knit 2 plain, slip and bind, knit 2 plain, repeat from twice; then over and nar-row 3 times, over, knit 13 plain.

5th row: Knit 10 plain, narrow once, " over and parrow 3 times, over, knit 5 plain, over, knit 2 plain, slip and bind twice, knit 2 plain, repeat from twice; then over and narrow 3 times, over, knit 14 | ing-roo

7th row: Knit 12 plain, over and narrow 3

7th row: Knit 12 plain, "over and narrow 3 times, over, knit 2 plain, slip and bind, knit 4 plain, slip and bind, knit 2 plain, over, knit 1 plain, repeat from "twice, then over and narrow 4 times, knit 12 plain.

9th row: Knit 13 plain, "over and narrow three times, over, knit 2 plain, slip and bind, knit 14 plain.

11th row: Knit 14 plain, "over and narrow 4 times, knit 11 plain.

11th row: Knit 14 plain, "over and narrow 3 times, over, knit 1 plain, slip and bind twice, knit 2 plain, over, knit 5 plain, repeat from "twice; then over and narrow 4 times, knit 10 plain.

Repeat from first pattern row as many times as required, then knit across eleven times alternately plain and purf. Add fringe at the ends. Mrs. F. says, very correctly: "It is a very pretty tidy." The samp'e inclosed would, however, have been handsomer with finer cotton. Coarse cotton should never be used for a tidy. For a counterpane it is permissible. Remember that where the directions say "over and knit 2 together three times," etc., the "over" is to be repeated, as well as the knit 2 together. well as the knit 2 together.

The fringe is simply knotted on the end of the tidy, and is about 4 inches deep.

CROCHET EDGING.

Mrs. W. H. C. and Miss D. L. M. both send directions for making a pretty little edging as follows: With 36 spool cotton and a fine hook make a chain of 9 stitches; miss 6 and in the 7th chain stitch make 1 treble, then 2 ch., miss 2, and in the next ch, make 1 treble. Turn, make 4 ch., 1 treble in 1st treble of preceding row, 2 chain and 1 treble in 3d chain stitch of the first hole. You now have a square of 4 holes; turn, make 3 ch., 3 trebles in first hole, 1 treble in treble of preceding row, 13 trebles in 2d hole, 1 D. C. in the same stitch in which the 2d treble of 1st row was made; turn, 1 D. C. in each treble of preceding row. This makes one scollop or sendyth.

vandyke.

For the next make 5 ch., 1 treble in 3d D. C. of preceding vandyke, 2 ch., 1 treble in 5th D. C.; turn, 4 ch., 1 treble in treble of preceding row, 2 chain, 1 treble in 3d chain stitch of 1st hole—continue as in first vandyke. All the succeeding vandykes are like the second one.

STOCKING KNITTING. EXAMPLES. FOR A CHILD FROM 6 TO 8 YEARS.

Fine German yarn; No. 16 needles.
Cast on 100 stitches.
Eibbing—kuit 24 rounds.
Leg—100 stitches—kuit plain 614 inches, increasing 1 stitch on 1st round.
Narrowings—5 intakes with 5 rounds between, 4 with 6 rounds, 3 with 7 rounds, and 2 with 8 rounds between.

Ankle -73 stitches-knit 43 rounds. Heel-37 stitches-knit 31 rows; pi

Ankle - 73 stitches - knit 33 rows; pick up stitches till there are 28 on each beel needle.

Foot-73 stitches - knit 44 rounds, knitting 2 together at back of foot on first round to make even nomber.

Decrease the toe 11 rounds, with one plain row be-

Cast off with 14 stitches on each needle.

FOR CHILD 6 TO 8 YEARS. Stout German knitting yarn; needles No. 14.

Stort German knitting yarm; needles No. 12a.
Cast on 66 stitches.
Ribbing—knit 20 rounds.
Leg—66 stitches—knit 42 rounds, increasing 2 rounds, at each side of the seam, with 7 or 8 rounds between each, after the 24th round. This makes 70 stitches when the narrowings are reached.
Narrowings—3 intakes with 4 rounds between, 3 with 6 rounds, 3 with 8 rounds.
Ankle—52 stitches—knit 27 rounds.
Heel—27 stitches—knit 21 rows; pick up the stitches for the foot till there are 19 on each heel needle.

Foot-52 stitches—knit 45 rounds.

Decrease for toe 8 rounds, with one plain round Cast off with 10 stitches on each needle. FOR A CHILD 8 TO 12 YEARS.

Stout German yarn; needles No. 14. Ribbing—knit 20 rounds.

Leg—75 stitches—knit 60 rounds, or 5 inches in length, increasing in 4 rounds with 5 or 6 rounds between after knitting 24 rounds, or till there are 8 stitches in all. Marrowings-5 intakes with 3 rounds between, 6

Cast on 84 stitches.
Ribbing—knit 24 rounds.
Leg—84 stitches—knit 78 rounds, increasing 4 rounds after the 30th round, with 5 or 6 rounds between, or till there are 92 stitches on the needles.
Narrowings—4 intakes with 3 rounds between, 4 with 4 rounds, 3 with 5 rounds.
Ankle—70 stitches—knit 39 rounds.
Heel—35 stitches—knit 37 rounds.
Heel—35 stitches—knit 27 rows; pick up stitches till there are 25 on each heel needle.
Foot—70 stitches—knit 57 rounds.
Decrease 11 rounds for toe, with 1 plain round between.

Cast off with 13 stitches on each needle. FULUSIZED BOY'S STOCKING Strong German or Scotch yarn; needles No. 12.

Strong German or Scotch yard; needles 10. 12.
Cast on 76 stitches.
Ribbing—kmt 20 rounds.
Leg—76 stitches—kmt 10 inches.
Ankle—58 stitches—kmt 4 inches.
Heel—28 stitches—kmt 2½ inches.
Foot—58 stitches—kmt 5 inches.
Decrease in 9 rounds of the leg—18 decreasings—with 10 plain rounds between.
Decrease in 8 rounds of the toe—32 decreasings in all—with 26 stitches—13 on each needle.
LaDy's oppunary SIZE. LADY'S ORDINARY SIZE.

Merino wool; needles No. 18. Cast on 148 stitches. Ribbing-knit 30 rounds. Log-148 stitches-knit 148 rounds plain; in-

Log-148 stitones-knit 148 rounds plain; increase I stitch.

Narrowings-3 intakes with 6 rounds between, 3 with 7 rounds, 4 with 8 rounds, 5 with 9 rounds, 3 with 10 rounds between.

Ankle-113 stitches-knit 63 rounds.

Heel-57 stitches-knit 48 rows, pick up the stitches till there are 44 on each heel needle.

Foot-113 stitches-knit 88 rounds, knitting 2 together at bottom of foot on first round to make even number.

Decrease in 19 rounds for the tee-76 decreasings n all—with I plain row between. Cast off with 18 statches on each needle. ANOTHER LADY'S STOCKING.

Fine German yarn; needles No. 16, Cast on 112 stitches.
Ribbing—knit 24 rounds.
Leg—112 stitches—knit 119 rounds plain, or 712 Natrowings—3 intakes with 4 rounds between, 4 with 5 rounds, 4 with 6 rounds, 3 with 7 rounds, 3

-78 statches-knit 47 rounds, or 3 inches. Hecl—39 stitches—knit 35 rows; pick up the ditches til there are 33 on each heel needle.
Foot—78 stitches—knit 67 rounds plain, or 414

nches.

Decrease in 12 rounds of the toe—48 decreasings in all—with 1 plain row between.

Cast off with 15 stitches on each needle.

SCRAP BAG

SCRAP BAG.

German Edging.—Mrs. I. C. calls attention to the fact that at the end of the second row of this edging it should read knit 1, instead of 7. Knitters can mark the correction on their filed copies.

Miscrilankous.—Mrs. A. D. hopes that Isabel G. E. will give directions for the knitted fringe in double zephyr, mentioned the other day.—Mrs. D. will find a good fringe in double zephyr on page 31 of the Knitting Extra No. 62.—Hatte S. M. writes:

"Will someone please send through The Tribune directions for the popped-corn stitch," is entirely new to the Department, but it recommends a course of "Buttons," as described on page 22 of the Knitting and Crochet Extra No. 62. New subscribers would find most of their questions answered in the two Knitting Extras already published.

VICTOR HUGO'S HOME IN EXILE.

From The Manchester Examiner.

If the visitor to Guernsey wants to see the island in a hurry, he can take his seat in one of the public cars. But the best method is to walk, with no other incumbrance than a stout stick. Victor Hugo says that for purposes of poetic inspiration a walk in the early morning is as good as one in the evening, and while the traveller climbs the antique Rue des Cornets and part of another hill appropriately called Hauteville, he may meditate upon the poet's words until he arrives opposite the poet's house in the middle of the street last named. The first idea of a stranger might be that the great mansion is either a barrack or a workhouse, but he will soon recollect that neither the one nor the other would look so terrifically gloomy, and will probably come to the conclusion, without assistance, that this fortress must be the abode of genius. So it is, or rather was, for the great man lives in Paris now, and his sister-in-law, Madame Chenay, and the servants are the only occupants of the place, except for a few months during the summer, when M. Hugo and his grandchildren, with their mother and a few friends, come over for a holiday. But though always gloomy outside, the house was once full of sweetness and light, when Madame Hugo held a sort of little court, at which half the genius in France periodically did homage; when the grand farceur, Alexandre Dumas, pere, used to meet the sedate Vacquerie; when Lockroy discussed politics with Lonis Blane; when the smoking-room rang with denunciations of "cemenonge qui état PEmpire" which would have made the Napoleonie cars tingle; when to be a "proseri" was to have the entres to Hauteville House, before death

cussed politics with Louis Blane; when the smoking-room rang with denunciations of "eemensong qui éta-t PEmpire" which would have made the Napoleonie cars tingle; when to be a "proscri!" was to have the entres to Hanteville House, before death had struck down every one of the family except the grandsire and the two children who are the sole heritors of his name.

Those brilliant circles meet there no more; in the words of another poet, "All are vanished now and fled; some are married, some are dead"; and the great house is given up to silence, and to what those who knew it of old call desolation. Anybody is welcome to go through it for the asking, and to visit such of the rooms as are not shut up altogether or used by the members of the household. Every part of the place bears the impress of the mind which created "Hernani" and "Ruy Blas." You feel the presence of the very spirit of romanticism in the sombre magnificence of the great drawing-room, in the gloom of the "oak gallery," filled with artistic treasures of extreme rarity and value, in the dining-room with its walls covered with Dutch tiles, and its great canopued chair, or rather thone, which stands at one end of the table, and across which is a stout iron chain intended to prevent any one sitting there except the gnost of the ancestor of all the Hugos, who is supposed sometimes to preside at dinner

All the decorations of the place might not please a severe taste, but all are eminently characteristic of the owner, and like Hood's "Haunted House," the mansion is fall of a sense of mystery and of awe. If the owner is not there you may be permitted to go into his private apartments, one of which the sleeping-room, is not much better furnished than a cell in Newgate or a workhouse dormitory, the simple tastes of the occupant being quite satisfied with a hard pallet to lie upon and such bedroom furniture as is absolutely necessary.

The other is a low room opening out on the broad leads at the top of the house, and to literary men it is one of the most int

mere affectation, have gained for their author the foremost place among the literati of his time. The room is little more then a garret. Books are piled up anyhow against tre walls, and a few penand-ink sketches by M. Hugo himself, one representing a dead smuggler hanging in chains from a gibbet, as described in "L'Homme qui Rit," are the sole decorative features of the place.

From the leads outside, which form a promenade all round the house, the view is magnificent. Below, on the left, is the town of St. Feter Port and the harbor, alive in summer with yachts and sailing boats. Far away are the Casquets and Alderney; and nearer, the islands of Herm, Jethon, and Sark, with behind them, if the day is sufficiently clear

and nearer, the islands of Herm, Jethen, and Sark, with, behind them, if the day is sufficiently clear to allow it to be seen, the coast of France; and the eye may follow the horizon down to Jersey, having by the time the view is intercepted swept over a range of more than a hundred miles.

CONSERVATISM AND INNOVATION.

CONSERVATISM AND INNOVATION.

From The Hour.

A young man was arrested the other night in the Strand, in London, for appearing in a suit of bed chintz of various gay colors and a tall white hat. His eyebrows were painted black. The upper part of his face was daubed with blue and the lower with bright crimson paint. He carried in one hand an umbrolla, in the other a rifle, besides a sword and a brace of cavalry pistols in his belt. This eccentric person was arrested and arraigned at the Bow Street Police Court for disorderly conduct and for creating a disturbance, and was ordered by the magistrate to find a surety in £20 for his good behavior. Now this young man might walk down any of the fashionable or busy thoroughfares of London at high noon, or appear at any aristocratic croquet party, or even pay his respects to his sovereign, is something like the following costume: A woollen cap with an eagle's feather and a silver aigrette; a tight jacket with brass or nickel buttons; a short petticoat of different colors, bare knees, plaid stockings, with a knife and fork stuck in one garter and a spoon in the other, a pouch with tassels of black horse hair, and a mediseval broadsword at his side. This is the correct Highland dress, which is worn by several regiments of the British army, and in which Xing George IV., when he was very fat and old, appeared on his work besurd than the contume of the young idiot who was arrested in the Strand.

THE CHRONODERS.

The Science Observer publishes a long description of a new and simple instrument invented by S. C. Chaudler, ir., of Boston, for finding the time by equal altitudes of the sun. It consists of a swinging bar, suspended at its upper end on a pivot in such a way as to permit the bar to assume freely a vertical position without any torsional revolution. To the bar is affixed a small telescope, the object-glass near the bottom, the eye-lens at the top of the bar. Below the phject-glass a frame is fixed to the bar, carrying a plane mirror swinging on a horizonthe phject-glass a frame is fixed to the bar, carrying a plane mirror swinging on a horizontal axis and provided with a clamp for fixing the mirror at any desired inclination. Below this is a metal bob. The whole instrument thus forms a pendulum, which is suspended inside a large tube, at the base of which are approximate levelling screws. A smaller tube at the top carries a dark-glass directly over the eye-lens of the inclosed telescope, without touching it.

From this description of its construction, it is evident that, if the instrument is turned so that the mirror is toward the sun, and the mirror is revolved on its horizontal axis until the rays from the sun are reflected directly up the telescope tube, an eye looking into the instrument from the top will see an image of the sun in the field of view. As the sun rises or falls in the heavens, this image will rise or fait in the field of view, and its passage may be observed over a horizontal bar or wire placed observed over a horizontal bar of whice placed in the common focus of the eye and object glasses, and so adjusted in direction that it represents a section of a small circle in the heavens parallel to the horizon. This explanation will indicate the mode of using the instru ment in getting the time by equal altitudes of the sun. The instruments thus ar constructed are very compact and are portable in the coat pocket. They have object-glasses of six inches pocket. They have object-glasses of six inches focus, the magnifying power being seven or eight diameters. The whole caronodeik is about one and three-quarters inches in diameter, with inand stands about nine inches high. With in-struments of this size and construction, says Mr. Chandler, the probable error of a single de-termination of the clock time with one in-strament may be definitely sated to be within one second of time. Indeed, the actual results of an extended series of experiments with several instruments show the probable error of a determination with one instrument to be eighttenths of a second. The Observer also publishes tables to be used with the instrument, and gives practical illustrations of its usefulness.

THE CARIBBEAN SEA BOTTOM.

Some interesting facts respecting the depth of the western portion of the Caribbean depth of the western portion of the Caribbean Sea have been recently brought to light. Amongst other researches a line of soundings was run by the United States Coast Survey steamer Brake, from St. Jago de Caba to the east end of Jamaica, when a depth of 3,000 fathoms was found twenty-five miles south of Caba. Subsequent soundings proved this deep sport to be the eastern end of an immensely deen valley extending from between Caba deep spot to be the eastern end of an immensely deep valley extending from between Caba and Jamaica to the westward, south to the Cayman Islands, and up to the Bay of Honduras. The Cayman Islands and the Misteriosa Bank were found to be summits of mountains belonging to a submarine extension (very steep on its southern slove) of the range running on its southern slope) of the range running along the southeastern side of Caba. valley is narrow at its eastern end, but widens between the western end of Jamaica and Cape

between the western end of Jamaica and Cape Cruz, when the soundings were 3,000 fathoms within fifteen miles of Cuba, and 2,800 fathoms within twenty-five miles of Jamaica. Taking it altozether it was found that this submarine valley extends for 700 miles between Jamaica and Cuba, with an average breadth of eighty miles. It covers an area of over 85,000 square miles, having a depth nowhere less than 2,000 fathoms, except at two or three points, which are the summits of submarine mountains, and with the greatest depth of 3,428 fathoms. The low island of Grand Cayman, which stands scarcely twenty feet out of the sea, is really the summit of a mountain 20,568 feet above the bottom of this submarine valley, an altitude exceeding that of any mountain on an altitude exceeding that of any mountain on the North American continent. Calculating the height of Blue Mountain in Jamaica from the bottom of this valley, it would give an aitstade of nearly 29,000 feet, exceeding any of the Himalaya range. It is proposed to call this great valley the "Bartlett Deep," in honor of its discoverer.

TANNING LEATHER.

According to Engineering, an important step in advance has recently been made in Germany in the science and art of tanning leather, and within the last few months the system referred to has been practically worked out on a suffi-ciently large scale in a small experimental or exhibition tannery in Glasgow, erected for the se of demonstrating the value of

new process. The process is the invention of a German chemist, Dr. Christian Heinzerling, of Frankfort-on-the-Main, and seems destined to re-sult in a total revolution in the system of tanning which has hitherto been in use and is truly time-honored, masmuch as it entirely dispenses with the ordinary tanning materials—oak-bark and other astringent vegetable products—and involves the use of inorganic chemical com-pounds only, the special member of which is bichromate of potash. Generally speaking, it may be said that the other compounds—all of which are readily soluble in water—have as their function the decomposition of the bi-chromate of potash, so as to set free its contained chromic acid, which is really the chemical agent that exerts the tanning effect on the forming the corium or lower layer of the animal hide.

There are many considerations which seem to justify the expectation of great results from the adoption of the Heinzerling process. One leading fact is, that it requires for its com-pletion a period of only from four to five or six weeks, whereas the bark-tanning process requires from twelve to twenty or occasionally even thirty mon hs for its completion. It has already been adopted in fourteen tanneries in Germany, and is being introduced into Russia, Belgium, France, and Italy.

THE DEARBORN REFRACTOR.

Mr. Burnham's work with the great Chicago telescope, since he has had access to it, is well known, but Science would like to see the inknown, but Science would like to see the instrument used for the systematic figuring of the fainter nebulæ. The light-grasping power of the refractor seems to be unexcelled. Mr. Burnham says of it: "I know of no object, faint or otherwise, which has been seen at Washington or elsewhere, that cannot be seen perfectly at Chicago, and accurately measured." And Professor Hongh, Director of the Dearborn Observatory, points out that those difficult objects, Ariel, Umbriel, Titania, and Oberon, the four satellites of Uranus, can readily be seen and measured, under ordinary atmospheric conditions, with the Chicago telescope, near the time of the planet's opposition.

Some time ago, Mr. Burnham sent over to scope, near the time of the planet's opposition.

Some time ago, Mr. Burnham sent over to England a series of tests for the great reflector possessed by Mr. Common, and considered the finest reflector, if not the finest telescope, in the world. This reflector was the first instrument to detect the satellites of Mars at its last opposition. It would be interesting to know what was the result of the friendly contest between the English reflector and the

INKING RUBBER ROLLERS.

Inking rollers made of india rubber have been occasionally made use of from time to time for many years, but owing to inexperience in their manufacture and use, the results have been, until recently, far from satisfactory. Various until recently, lar from satisfactory. Various improvements have, however, been made in their manufacture for printing purposes. One London manufacturer makes his rollers from red rubber, which is, of necessity, very thoroughly cured, in order to enable it to withstand the action of fatty inks; and after the rollers have been turned true by means of self-acting have been turned true by means of self-acting have been turned true by means of self-acting lathes, a fine surface is given to the rubber by means of glass paper. In order to give these rollers the softness which is necessary in some cases, a series of perforations parallel to the axis is introduced. For lithographic printing, these rollers have considerable advantages over the usual leather roller.

A LENS WITH VARIABLE FOCUS.

The property which the human eye possesses of forming distinct images of all visible distances is, as is well known, due to the power of the crystalline lens to alter its focal length.

intakes with 4 rounds, and 1 intake with 6 rounds.

Knit 2 together to make even number.

Ankle—58 stitches—36 rounds.

Heel—29 stitches—36 rounds.

Heel—29 stitches—36 rounds.

THE CHRONODEIK.

THE CHRONODEIK.

The Science Observer publishes a long description of a new and simple instrument invented by Dr. Cusco. This ingenious device consists of two fine glass discs set face to face in a suitable ring frame, and having an intermediate space which can be filled with time by equal altitudes of the sun. It consists of a swinging bar, suspended at its upper end on a pivot in such a way as to permit the bar to assume freely a vertical position without any pressed by hand. When there is normal reservoir may also take the form of a syringe bulb which can be pressure on the water. The reservoir may also take the form of a syringe bulb which can be pressure on the water the discs remain flat, and the water lens is therefore a plane one; and the water lens is therefore a plane one; but as the pressure is increased the discs become more and more convex outwards, and a ray of light passing through the lens is there-fore more and more converged. In the same way a concave lens may be formed by gradu-ally lowering the water pressure.

A BLIND MAN'S ASCENT OF MONT BLANC.

To the Editor of The London Times.

My ascent of Mont Blanc was not a sudden, reckless undertaking. It was the result of a fixed purpose, and only undertaken after a long and careful preparation. I thoroughly understood and fully appreciated all the difficulties. In order to carry on my work in behalf of the blind, it is necessary to keep up my pluck, energy, and determination. Skating, swimming, rowing, riding, have all contributed their share to this end, but last year I went to Switzerland to try mountain climbing. The experiment was highly successful. This year I went again, accompanied by my wife, son, and his Highness Prince Alexander George of Hesse. After four weeks' continuous work on the glaciers and in various mountain ascents, I went to Chamounix, and without difficulty achieved the object of my summer's excursion.

weeks' continuous work on the glacers and in various mountain ascents, I went to Chamounix, and without difficulty achieved the object of my summer's excursion.

In company with my son, with Benoit as my leading guide, I attacked Mont Blanc. At first the guides expected to drag me up, but I gave them their choice to leave me to climb in my own way or give up the undertaking. I was resolved to make an honest climb or give up the ascent. I took my place on the rope in the ordinary way, except that the distance between my son and myself was only a few feet. This enabled me to follow his footsteps closely, and in such places as the very dangerous crevasse near the grand plateau we moved in unmediate succession. For instance, before he would take the fingers of his right hand out of the hole which had been cut in the ice wall for the purpose, my left hand would touch his right hand and be ready to occupy the hole as soon as he had relinquished it. With the exception of cutting very excellent steps for me, the guides during the ascent did not assist me in any way. I was glad to that that the ascent of such steep places as the Bosse was much easier than I had anticipaced. The cutting of steps required considerable time, and allowed me at my leisure to prepare for each difficult climbs a short walking-stick, which I often use in my right hand as an indicator; and to show the skill which it is possible to attain in this way I may mention that I did not miss a single step in the entire ascent. When I reached the summit. Benoit exclaimed: "Welcome to the summit. Benoit exclaimed: "Welcome to the summit. They had all been carefully studied, and each in its turn brought some new winged hope for the future. It was very cold, and the guides soon reminded us that we must begin the descent. Before doing so, however, I consecrated my ife anew to the blind, and have now returned to England to prosecute this one purpose of my life.

In difficult climbs I rely entirely upon my own careful steps and the strength of my own arm, but i

In difficult climbs I rely entirely upon my own careful steps and the strength of my own arm, but in making descents it is otherwise, especially over snow slopes. Here I take the guide's arm and my alpenstock in the other hand, and bound down with great rapidity. We made the descent from the summit to the Grand Mulets in three hours and thirty minutes.

Royal Normal College for the Blind.

MR. THOMAS HUGHES ON SUNDAY OBSERV-ANCE.

Before entering upon his lecture on "Charles Kingsley." in Cincinnati on Sunday last, Mr. Thomas Hughes said: "In deference to the strongly expressed wish of the Young Men's Unity Club of this city, I am here today to deliver this address on a Sunday afternoon. Before proceeding to my immediate subject, I wish to make my own position here perfectly clear. In my own country I have never taken part it any such work as this. Without the least wish to judge, still less to censure, others, many of whose views I acknowledge have much to commend them, I have never been able at home to satisfy myself that I should not be doing more harm than good by identifying myself with those who provide general lectures for the people on Sanday afternoons. I was trained as a child to look upon Sunday as a day which should be devoted to rest and to worship. Every year that has passed over my head since culcibood has strengthened those early impressions. I look upon Sunday as a quite unspeakable tlessing to all Christian nations, and above all to our race, upon whom so large a share of the world's hard work has been iaid in this marvellous country, and who are addressing themselves to it with an energy full of hope and promise for country, and work has been and in tells marvenous country, and who are addressing themselves to it with an energy full of hope and promise for the future, while controlled by high purpose and high principle, but constantly in danger of running into feverish haste and reckless and unrighteous greed of possession—an unmanly hankering effor material managing and read leading the starting language of the starting language ning into feverish haste and reckless and unrighteous greed of possession—an unmanly hunkering after material prosperity and wealth. Against this false tendency—this subtle temp, attouch us English folks on both sides of the Atlantic—Sunday, God's appointed day of rest and wership, stands out as the great bulwark and safeguard. No man who has faith in God and a true love for his country would do an act or say a word which could endanger in the remotest degree the reverence for or the observance of that day. We have to endeavor for ourselves and for those who come after as to restore the true ideal, and reassert resolutely, but wisely and zently as we may, the true relations between rest and worship, which alone can restore God's appointed day of rest to its full power, and make it mightly again for the healing of the nations. To help on this good work, then, as I understand it, I am here to-day. I trust—indeed, I take it for granted—that the object of this society is at bottom the same as my own, otherwise I am here under false prefences. We are not here professedly, indeed, for an act of worship is the common acceptance of the word. But we are here to lift up our hearts for an hour above their ordinary surroundings; and at any rate to commune if we can with one of the brayest and noblest spirits. ordinary surroundings; and at any rate to commune f we can with one of the bravest and noblest spirits who have been working amongst us for the good of man and the glory of God in this generation."

ANOTHER "MISSING LINK"

From The St. James's Gazette.
Professor Owen's researches among the South
African fossils have just brought to light another of Professor Owen's researches among the South African fossils have just brought to light another of those curious connecting links between widely different classes of animals which the theory of evolution has led us to expect, and which the diligence of fossil-hunters has now made familiar. Already we have grown accustomed to hear of birds with lizard like tails or with teeth in their jaws, of saurians with wings, and of horses with three toes. But Professor Owen's new species is one of still deeper interest, because it helps us to bridge over the gap between the mammais and the cold-blooded vertebrates. One by one the guits which separated fish, amphibian, reptile, and bird have been filled up; and now the last of them, between reptile and mammal, seems in a fair way to be filled up in its turn by these South African remains. The fossil bones in question are those of an extinct reptile which in some points of its skeleton offers an analogy to the ornithorhynchus, or duck-mole of Australis—the creature familiarly known as "the beast with a bill." The duck-mole probably possesses more aliases than any other living animal; but its recognized scientific title has been finally settled as platypus; and Professor Owen has accordingly bestowed upon the South African form the formidable name of platypodosaurus, which sums up its main characteristics in a juntshell. It is, in fact, a lizard-like reptile with a tendency toward certain low types of mammalian structure.

To estimate the real value of the newly discovered creature, and the light which it casts upon the history of evolution, we must remember what are the peculiarities of the living duck-mole itself. It is, indeed, with its first cousin, the echidna, one of those remarkable surviving types which occasionally enable us, even in our living world, to span the apparent gulf between lighty described as a fur-covered animal which lavs eggs. It is thus all guest the deck of the real proof and the most important the professor when his allowed to the newly discovered cr

sionally enable us, even in our living world, to span the apparent gulf between highly differentiated organic classes. A mammal only by courtesy, the duck-mole may be roughly described as a fur-covered animal which have eggs. It is thus already not very far removed in the most important particular from the reptiles; while, on the other hand, it clearly lea's us on to jouched animals, like the kangaroos, which bring forth their young alive, it is true, but still in a condition scarcely differing from that of a chick in the egg.

While there are still considerable gaps to be filled in the series at certain points, we may nevertheless say that the pedigree of the mammalia from the reptiles is now pretty surely made out. Among living or extinct forms we have, first, the primitive reptile; then a reptile with nascent mammalian tendencies; next, a still more mammalian but overviviparous form; then, again, a group of pouched mammals; then a few closely allied but poachless mammals; and then the various lines of descent culminating in our highest existing creatures. And the geological succession of all these forms is exactly what, on the theory of evolution, one would expect to lind it.

"Sit down," said a handsomely-dressed and vivacious young lady to a companion at a fashionable watering place: "sit down: it's the only thing you can do here without being obliged to pay for it."

**ATURAL LAW.—Englishman (to Scotch Packman)—"Mac, how is it that when you scoth come to England you mover go back !" Scot—"Weel, ye see, it is in a way impossible for us to go back, because we mak' it a point to be aye gaun forrant."—Ljudy.

RELIGIOUS INTELLIGENCE.

Bishop Doane, of Aibany, has published a pamphlet on "Kindred and Affinity, or God's Law of Marriage," in which the sixty prohibited degrees in the English Table are fotcibly advocated. Of these sixty degrees all but six are commonly assented to, so that the argument is based mainly on the remaining six. These turn upon the pivot of the two prohibitions: "A man may not marry his wife's sister;" and "A woman may not marry her husband's brother." The Bishop aims to show: 1st, That marriage with a deceased wife's sister is forbidden in Holy Scripture, because it is the same sin as marriage with a man's own sister. 2d, To give, from various sources, the catena of authorities showing that this has been understood to be the meaning and intent of Holy Scripture, in all ages and in all portions of the Christian Church. He argues the guestion closely, and finds only He argues the question closely, and finds only two real difficulties: the sentimental difficulty, and the difficulty of dealing with persons who ignorantly or wilfully have violated this law of God. Of the first it is very simple to say, in answer to the sentiment of the sister being the best mother to her sister's children: Let her be the mother as she can be, and is, in innumera the mother as she can be, and is, in innumerable cases, wherever and whenever the impossibility of her becoming the wife of her sister's husband is recognized. A man to whom the bitterness of widowhood has been sent must take his choice. If he wants a mother for his children, let him take home to them his sister, by affinity; the blood-sister of his wife. If he wants a wife, let him take to himself some other woman than the one whom God's word doth not allow him to take. As St. Basil says: "A second marriage is allowed, but not as a passage to licentiousness." The Bishop not as a passage to licentiousness." The Bishop adds: "How can a man soberly lift up this sentiment, this expediency, this impression of what he teels to be the sweetest and most natural thing, against the enormous weight of matural thing, against the enormous weight of God's law as witnessed to, in its meaning, by the Church of sixteen, aye of eighteen centuries. I call it sentiment, taking the inoftensive name. It is often a sickly sensualism poorly disguised under a thin veil. And against it is to be set up the fact that the impossibility of marriage establishes firm'y the second and most plassed relatinghin of the possibility of marriage establishes firmly the sacred and most blessed relationship of the wife's sister in the family. The very name by which the relation is known involves the certainty of this protection. She is a sister in law, i.e. in the law of God; as our good English speech defines it, a sister, with whom, be-cause marriage is in possible, the wise intimacy of a brother's relation is possible and safe." The Bishop's arguments are directed mainly to the Protestant Episcopal Church. "Day after day," he says, "the loosest and lowest theories about the marriage tie are finding expression, about the marriage tie are finding expression, in legislative action proposed or passed. And a becomes us, however small, in proportionate mumbers, this Church may be, among popular denominations or godless lawmakers or the ea y venality of Roman dispensers with the truth, it becomes us, all the more, to let our little candie throw his beams,' and shine like 'a good deed in a naughty world.'"

Sunday-school. Literature.—The Rev. M. C. Lockwood, of Albany, delivered a striking address at the annual session of the Hudsen River Baptist Association North, last Tuesday night. He declared that the Sunday-school libraries of the present day are full of books navored with cant, which, under the thin years of fullician preach by precise. thin veneer of religion, preach hypocrisy. "I would advocate," he said, "a library that would contain standard works, for so far as literature for the children and young people is concerned I deem the present character of our libraries, extramely poor. The children for the present character of our libraries extremely poor. The rising genera-tion is a reading one, and there are few children but that like to read, and do read. Reading matter is much more accessible to-day than ever before, not only because of its quantity but of its cheapness, and books are written not only to cater to the taste of our grown people but to catch the eye and interest of our little people. Most of our great publishing our little people. Mest of our great publishing houses publish a paper especially for children. Weeklies, monthlies, and story-books are dropping from the press by thousands. They are hidden under the desk in the school-house, read at night in hours stolen from needful sleep, carried in the box of the shoeblack, read behind the fence by the farmer's boy, under the pillow by the chambermaid, in the hand of the nurse when she should be attending to her infant charge—everywhere books find of the nurse when she should be attending to her infant charge—everywhere cooks find their way, and the worst of it is that most of these books are no books. They are the nameless spewings of obscene vulgarity, the rate conceptions of coarse fools, the brainless bufloonery which jests at holy things, a prison literature which makes a hero of the boy who disregards his parents, plays tricks upon his teachers, runs away from home, and joins pitates or brigands. With proper attention, the Sunday-school abrary can overcome this the Sunday-school abrary can overcome this great evil, by putting into the hands of children books that would cultivate a taste for only the our library system has been the attempt to adhere to what is termed the purely religious, and in order to carry out this purpose they have accumulated a quantity of weak and drivelling stuff; the prim Miss Nancy milk-and-water gush that makes Christianity a bore and the good little cuild a prig and cauting nuisance. Most religious novels have nothing to commend them other than the claim they set up for being rengious; they are veritable hypocrites, whited sepuichtes, novels of a spice with enough low order and a poor style, with enough religion as a sugar coating to induce a Sundayschool library to take them. I have come to the opinion that a day of reform is not far off, and he time is near when our best and purest fiction writers shall have a place in our Sunday TURKISH INTOLERANCE .- A Moslem lady and

her daughter, living in the town of Surfa, in Southern Armenia, embraced the Christian re-licion, and the girl married an Armenian. The ligion, and the girl married an Armenian. The Moslem inhabitants, excited by fanaticism, armed themselves with clubs, daggers and guns, and attacked, on the night of August 8, the houses of the Armeniaus, thereby spreading terror among the Christian families. ing terror among the Christian families. They arrested the newly married couple, and led them before the Moslem Governor, who thanked the Mahometan mob for their devotion, and but the Armenian and his wife in prison. Incidents such as this and the murder of Mr. Parsons impair the value of the moral which journals like The Telegraph and The St. James's Gazette draw from some correspond-ence lately published on the subject of Protence lately published on the subject of Protestant educational efforts in Turkey: "American and English missionaries, by means of the Robert College and other agencies, have done great good, and have not been offensively proselytizing. Their principal difficulties have arisen, not from Mahometan but from Eastern Christian fanaticism. The much-abused Turk is, as a rule, thoroughly tolerant in practice as well as theory, and the unchecked spread of Protestant missionary effort is the visible result of this—a result which cannot be witnessed in Russia, whose zeal for toleration only extends to her neighbor's practice, and never to her own. The distressing thing is that there should be Protestants ready to profit by the liberty thus granted to them, and to boast there should be Protestants ready to promy the liberty thus granted to them, and to boast of their success, yet blind enough not to see, or dishonest enough not to admit, that to the ex-ceptional mildness of the Turkish rule are they indebted for the possibility of diffusing their re-ligion in Turkey."

It is scarcely worth while to contradict the absurd report of the discovery of an original manuscript by the Apostle Peter in Jerusalem. It was in the hands, the story ran, of a Syrian anchorite, who refused to part with it to the British and Foreign Bible Society, notwithstanding the large sum with which that wealthy second to campt him. association sought to tempt him. Professor De Lagarde, of the University of Gottmgen-who Lagarde, of the University of Gottingen—who is reported to have been commissioned by the Bible Society to make inquiries into the authenticity of the document—has lately declared, in the columns of the Berlin National Zeitung, that the whole affair is "a swindle." It is well known, he observes, in initiated circles that "extensive manufacturies of antiquities and flown, he observes, in inflated circles that extensive manufactories of antiquities and nanuscripts exist in Jerusalem." The Prusmanuscripts exist in Jerusalem." The Prus-sian Government and German Oriental scholars were made the cruel prey of these decervers in the affair of the now notorious Moabitika.

FRUITAGE CF CHARTREUSE.—A large Carthusian monastery is now building in the English county of Sussex. It is to be dedicated to St. Hugh, and is to be an offshoot of the monastery of the Grande Chartreuse in the mountains of Dauphine. The estate is about 350 acres, of which fifteen are covered with buildings. The architect is M. Norwand, and the building is nearly as large as the parent house. The main court is larger than the Tom Quad at Christ Church, Oxford, or the great court of Trinity at Cambridge, and is FRUITAGE OF CHARTREUSE .- A large Car-

surrounded by a range of cloisters with stone-fretted vaults. The enclosed area is to be laid out with gardens and fountains, and a tower and spire of enormous height will rase above the southern gates. The chapel is to be of cathedral-like dimensions. The library, the refectory, and the chapter-house will be on a grand scale. Each choir-monk will have a bedgrand scale. Each choir-monk will have a bedroom, a sitting-room, two work-rooms, and a separate garden. Fishponds, a windmill, and a lake are being constructed, and the nucleus of a good library is already formed. The money comes from the sale of the famous Chartreuse. Generally the titular abbots of all the old Euglish chief religious houses have been kept up by the Roman Catholics, who even now, have, it is reported, some quiet ecclesiastic called the Abbot of Westminster.

The Rev. James Freeman Clarke remarked in the course of a sermon in the Church of the Disciples, Boston, last Sunday night, that in these days many have left off going to church, saying that they can get along just as well without the Sunday service, and that they derive no benefit from the preaching. This tendency is no douot in part a reaction from that rigor of church-going that prevailed with former generations, with whom attendance at church was regarded as a sacrament, as something good of itself independent of what might be derived from listening to or partaking in the services. So far has the reaction gone that in be derived from Instening to or particular in the services. So far has the reaction gone that in Boston a man is thought quite as well off who does not go to charch, and the non-attendants even take some credit to themselves as being of the class of advanced thinkers who have outgrown the church, and no longer need its help or guidance, but may be a law unto themselves

President Robinson told the Rhode Island Baptist Educational Society on Monday evening that be had been impressed with strange convictions of some evils connected with the eleemosynary aid of men looking to the Christian ministry. Yet he said this help must be given. All branches of Christendom feel this to be positively necessary. Dr. Robinson carnestly advocated such help of young men as should conserve their self-respect and manliness. In illustration of his point he teld how Mr. Garfield received his education. The man who furnished him the means of education, when he saw him a power in Congress, what satisfaction it was to him! And finally, he said, help those men who help themselves. President Robinson told the Rhode Island

Trement Temple, Boston, which was burned on August 14, 1879, will be reopened this evening, having been practically rebuilt. The property is controlled by the Evangelical Baptist Benevolent and Missionary Society, and is held subject to a mortgage of \$175,000, about \$100,000 of this amount having been expended in the reconstruction. The retuilding operadations, and ended with a thoroughly artistic decoration of the practically new structure; and throughout the entire work no expense has been spared to make the new Tremont Temple a safe, commodious, convenient and attractive resort for the public.

The Roman Catholics of Liverpool have organized a club known as "The Newman." The chairman stated at the first meeting that there was no Roman Catholic representative in Parliament for any constituency in the whole of Great Britain, and he believed this arose in a considerable dgree from the Roman Catholics not acting together, and not giving up pet schemes of their own. He believed Liverpool had a better chance of returning a Roman Catholic member than any other constituency, and that was an object to which they should look forward, as its realization would have a most powerful influence in favor of their Church.

There was an earthquake shock at Freiburg, Switzerland, three weeks ago to-day. A special high mass was being celebrated at the moment in the Crurch of St. Nicholas, it being the annual day of intercession, penitence, and thanksgiving, which is held in every parish in the Swiss Federation, Catholic and Protestant alike. The cantonal and municipal au-thorities were present in state. The conalike. The cantonal and municipal au-thorities were present in state. The con-gregation believed that the church was falling, and all fled to the doors, happily without any serious accident. Few could be induced to return for the remainder of the service.

The Suffolk West Association (Eastern Massachusetts) has decided that a positive belief in the endlessness of future punishment is not the endlessness of future punishment is not absolutely necessary for admission to the ranks of Congregational ministers, and that each case must be decided not according to abstract principles but according to its individual merits. The case is that of the Rev. L. I. Briggs, who had been prominent in the Universalist denomination, but found himself "too orthodox" to remain in that denomination.

The Baptist Weekly tells a story of a Con-necticut pastor who while preaching on Abrabest reading. The wise man will open to a ham's call to offer up Isaac, very gravely remarked: "It was no doubtful von that Abraham knew that he heard the voice of God, just as plainly as you hear my voice, if you are awake." That "if" made the drowsy ones straighten up.

The secession of the popular Broad Church The secession of the popular broad Chirteen preacher, the Rev. Stopford Brocke, from the English Establishment on account of avowed Unitariarism, is regarded by the religious press as an honest act which has been too long deferred. His sermons at Bloomsbury Chapel long ago carried him into practica. Socialanism.

The ancient English Church of St Michael's, Winchester, is about to be restored. The base of the tower was built very early in the reign of King John, fifteen years before the signing of Magna Charta. "And after the uproar ceased," was the first

line of Scripture read by the pastor of a church in Ithaca after an unusually noisy performance by organ and choir. Dr. Curry will become Associate Editor of The Methodist when his present duties as Editor of The National Repository end.

CURRENT RELIGIOUS OPINION.

EVILS OF CHURCH POLITICS.

Bishon Fick in the Christian Advocate.

We have suffered from "Church politics." Wo always sufter when individ ality results in individualism. Then sinful egotisms and selfishness are just at hand. Then there will be the developments of unchristian combinations to get into office. Then the brethren, otherwise great and powerful for good, will be found making chaues, pushing aside rivals, and doing everything in their power to absolutely make their own appointments. These are all disorganizing tendencies wherever they appear. Sufficiently produced, they will inevitably destroy Methodism. Are these tendencies in Ohio stronger than clsewhere? Perhaps not, But they are here in sufficient force to require faithful watchmen on the wails to lift up the voice of warning. Let our precious young men teware. Brothers everywhere, leave rings and political scheming to political demagogues. God in mercy protect the Church against them!

gogues. God in mercy protect the Church against them!

A POPULAR YOUNG PRELATE.

Prom The New York Tablet.

A condittor has been appointed for the archdiocese of New-York in the person of Bishop Corrigan. There is a feeling of general satisfaction among the clergy and laity on the subject of this appointment. The need of a condintor archbishop to the venerable Cardinal McCloskey has for a long time been apparent. Archbishop Corrigan moves to Cardinal MeCloskey has for a long time been apparent. Archbishop Corrigan moves to Cardinal MeCloskey's house at once. Several prominent clergymen are mentioned as likely to receive the mitre of the Newark diocese, among others Vicar-General Quinn, the Rev. Dr. McGlyna, Monsignor Doane, the Rev. James H. Corrigan, and the cardinal's secretary, the Rev. Father Farley. It is considered probable that the Very Rev. Monsignor Doane will be selected as the next bishop to succeed the Mcst Rev. Dr. Corrigan, because of his popularity in Newark, as well as because of his experience in diocesan matters generally. However, there is no absolute certainty yet as to the one who is to receive the new appointment. When consecrated some seven years ago, Archbishop Corrigan was the youngest member of the hierarchy, and now he is the youngest coadjutor archbishop in the United States.

IS PRESBYTERIANISM DECLINING!

IS PRESBYTERIANISM DECLINING The Rev. Wm. H. Roberts in The Observer.
The totals of the yearly additions from April,

75, to April, 1880, are given in the Mir	
1875 76	48,240
1876 77	32 277
1877-78	29 196
1878-79 1879-80	26,838
Grand total,	179,619

Grand total.

Deduct from this sum the difference between the total church membership in April, 1875—506,034—and the total in April, 1880—78,671—or 72,637, and we have left a total of 106,982 persons to be accounted for. From this last total deduct for deaths in the average ratio of 20 per 1,000, or for the five years, 56,276, and we have as a remainder, 50,706—a sum representing the number of church members who have disappeared from our rolls in wave unaccounted for during five years.